WHAT IS CLAIMED IS:

1. An optical communication multiplex device for a vehicle comprising:

optical communication lines connecting a transmitting terminal (Tx) to a receiving terminal (Rx);

contact resistances disposed near said optical communication lines to generate heat for changing the length of said optical communication lines;

a power terminal and a ground terminal respectively connected to one end and the other end of said contact resistances to thereby supply power to said contact resistances;

a control terminal for outputting a control signal for changing the length of said optical communication lines via said contact resistances supplied with power from said power terminal; and

a transistor connected between said control terminal and said contact resistances for carrying out a switching operation of power applied to said contact resistances from said power terminal in response to the control signal inputted from said control terminal.

2. The device as defined in claim 1, wherein a collector terminal of said transistor is connected to said power terminal, an emitter terminal is connected to a ground terminal, and a base terminal is connected to said control terminal.

3. The device as defined in claim 2, wherein a load resistance is connected between said collector terminal and said power terminal.

4. A communication method using an optical communication multiplex device for a vehicle, the method comprising the steps of:

turning on or off an operation of a transistor in response to a control signal from a control terminal;

carrying out a conduction of a corresponding contact resistance in response to the control signal from said control terminal when the transistor is operating, and carrying out a conduction of the corresponding contact resistance in response to a voltage inputted from a power terminal when the transistor is not operating;

receiving at a receiving terminal (Rx) a signal transmitted via an optical communication line adjacent to the conducted contact resistance; and

receiving only the phase-changed signal at the receiving terminal (Rx).